

THE BYZANTINE GOLD COIN FOUND AT ŻÓŁKÓW, (SOUTHERN POLAND), AND THE PROBLEM OF LIGHTWEIGHT SOLIDI IN CENTRAL EUROPE

One of the most interesting early medieval monetary finds on Polish territory is the solidus of Heraclius (610–641) discovered in Żółków near Jasło, Gorlice province. The item was published almost simultaneously by two competent Polish numismatists, Tadeusz Kałkowski¹ and Stefan Skowronek² in 1969–1970. The data in these publications have found their way to Polish numismatic and archaeological literature, and the solidus itself has been rightly called the last "ancient" or the earliest medieval coin to surface in Poland.³ Even though the recently published catalog of monetary finds by K. Beyer informs of a solidus found in central Poland (near Łęczyca) dating from the time of Theodosius III, early eighth century,⁴ this does not diminish the importance of the Żółków find. On the contrary, it seems to lend credibility to a discovery that partly bridges the gap in our knowledge of monetary circulation on Polish territory in the obscure seventh century. Research literature makes a reference to the Carpathian context of the discussed piece. I would propose a broader look and place Heraclius' solidus in an area embracing southern and partly central Poland in which coins of various

1 T. Kałkowski, "Żółków pow. Jasło. Solid bizantyjski z VII w.," [Żółków near Jasło. The Byzantine Solidus of the Seventh Century], *Wiadomości Numizmatyczne*, 12 (1969), pp. 46–47.

2 S. Skowronek, "Solid bizantyjski z Żółkowa nad Wisłoką" [The Byzantine Solidus of Żółków on the Wisłoka], *Acta Archaeologica Carpathica*, 11 (1970), pp. 128–129. I am grateful to Professor Skowronek for information he supplied me with.

3 E. Gąsowska, *Bizancjum a ziemie północno-zachodnio-słowiańskie we wczesnym średniowieczu. Studium archeologiczne* [Byzantium and North-West-Slavic lands in Early Middle Ages. An Archaeological Study] (Wrocław: 1979), p. 53; M. Salamon, "Mennictwo bizantyjskie. Stan badań i perspektywy" [Byzantine Coinage. The Present Status and Future Prospects] in: *Pieniądz starożytny. Stan badań i perspektywy polskich badań* [Ancient Coins. The Current State and Prospects for Research in Poland] (Warszawa: 1984), p. 115.; A. Kunisz, *Znaleziska monet rzymskich z Małopolski* [Roman Coin Finds in Little Poland] (Wrocław: 1985), No. 337, pp. 259–284; A. Bursche, "Znaleziska monet rzymskich z Małopolski. Uwagi na marginesie inwentarza Andrzeja Kunisza" [Roman Coin Finds in Little Poland. Remarks on Andrzej Kunisz's Inventory], *Wiadomości Numizmatyczne*, 32 (1988), p. 208. The terms "ancient" or "medieval" refer not only to the chronological division assumed but also to find association with a given group of relics. Two other coins from the time of Heraclius were found in Pomerania (one is uncertain), but they are linked with a different circulation sphere.

4 E. Triller, "Wykopaliska monet Karola Beyera" [Karol Beyer's Coin Finds], *Wiadomości Numizmatyczne*, 35 (1991), p. 51, No. 54.

metals (gold, silver, bronze) were found and which bears a resemblance to territories to the south of Poland and differs from northern Poland in respect to the structure of monetary finds.⁵ These remarks, however, do not exhaust possible interpretations of the Żółków piece.

Heraclius' solidus was defined in 1969 using the works of J. Sabatier and W. Wroth.⁶ The advances in Byzantine coinage systematics made in the past decades permit a closer identification and, consequently, establishing analogies with other pieces occurring in the sixth-to-seventh centuries in various European territories outside of the empire.

Let us review the basic data for the find and make some small corrections. There are some doubts about the exact circumstances of the discovery. What is certain is that it was made accidentally, in a field at Żółków, after World War II. It does not seem likely that its owner acquired it from another area or from a collection.⁷ Its size, 22 mm, and weight, 3.7 g,⁸ as given in both source publications, seem unquestionable. Using a photographic image, I can describe the coin as follows.⁹ Item in good condition, on both sides a visible shift in stamp resulting in a doubled image of part of the legend and effigy.

Obv.: $\delta\delta\text{NN}$ HeRACLIUS ϵT HeRA CONST PP AC ,¹⁰ the beginning of legend struck twice: $\delta\delta\text{NN}$ HeRA —; busts of Heraclius and Heraclius II Constantine (smaller), both wearing crowns (diadems) bent slightly upward and topped with a circle and cross, in chlamydes with fibulae with three pendants. Heraclius with a medium-sized beard. Heraclius Constantine smaller than his father, but larger than on earlier emissions. The young ruler's hair shorter than his father's. Between the rulers' heads, slightly elevated, an equilateral cross. Heraclius' head slightly distorted due to double strike.

Rev.: $\text{VICTORIA}/\text{AV}$ A ,¹¹ the beginning of legend double-struck $[\text{VI}]\text{CT}[\text{O}]$ —. In the exergue, the letters OBXX . Only the upper part of the letters OB is im-

5 I spoke about those spheres in 1987 to the Sixth Numismatic Session in Nowa Sól, cf. M. Salamon, "Napływ monet złotych bizantyjskich na ziemie polskie" (The Influx of Byzantine Gold Coins onto Polish Territory) in: *Złota moneta w Polsce* (Gold Coins in Poland) (Nowa Sól: 1980), pp. 23–27. Some remarks on the peculiarities of Little (south-eastern) Poland and Upper Silesia (Cieszyn region) can be found in Gassowska, *op. cit.*, pp. 51, 87.

6 J. Sabatier, *Description générale des monnaies byzantines* (Paris: 1862), I, p. 274, No. 48bis, Tab. XXIX 18; W. Wroth, *Catalogue of the Imperial Byzantine Coins in the British Museum* (London: 1908), I, p. 244, No. 426.

7 According to S. Skowronek, the solidus was found in a bomb crater soon after the war ended; according to T. Kałkowski, it was plowed up in 1967. Perhaps the find came up during land reclamation following war damage. The year 1967 may refer to the time researchers could study the relic. In 1978, the solidus was in a private collection in Gorlice.

8 The solidi of the time are about 20–24 mm in diameter. T. Kałkowski sets the weight at 3.7 g, S. Skowronek more exactly as 3.700 g.

9 I am grateful to T. Ślawnski of the Museum in Biecz for letting me use their photographs. Additionally, I used photographs in works listed in notes 1 and 2.

10 The last letter is difficult to read; to Skowronek it is AVC , to Kałkowski AC .

11 The last letter is read not as Δ (so in both works), but as A with the bar rising to the right Δ . This style of the letter is well known to have existed at the time; what is unusual is that the bar crosses the right arm in the A .

pressed, which makes it difficult to say whether it is OB or BO. Since an angle is visible in the second letter, we may assume – provided that we rule out an imperfection in the letter itself – OB as the more likely. The tops of the letters XX are very clearly visible, which sufficiently indicates the mint sign characteristic for a series of solidi struck in the sixth to seventh centuries.



The obverse and reverse types permit the Żółków solidus to be identified as a Heraclius No. 18 according to P. Grierson or No. 64 according to W. Hahn, dated by both scholars at 616 to about 625 (the Constantinople mint).¹² Thus, we are dealing with a lightweight solidus weighing 20 carats.¹³ The piece's weight, 3.7 grams, is just right for the average coin in this group.¹⁴ Since the coin was found to belong to this group, it is easier to interpret it and explore its links with similar finds elsewhere in Central Europe.

Lightweight solidi appeared in Byzantine coinage in 538, first in a 21 (or 22) carat version, and perhaps somewhat later (542) also as 20 carat pieces. Twenty-three-carat solidi were not issued until much later. Emissions of this group of coins are known up to the reign of Justinian II (the first period? 685–695), but the 20 carat variant goes no further than the reign of Constantine IV (668–685).¹⁵

12 P. Grierson, *Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection* (Washington: 1968), vol. II, p. 52, No. 18; W. Hahn, *Moneta Imperii Byzantini* (Wien: 1981), vol. II, p. 88, Tab. 1, 3; No. 64. Now Hahn narrows the dating for the emission down to 616–620 (see below, note 28). Assuming the reading BOXX, we would get No. 19 in Grierson and No. 65 in Hahn. In either case there is no record of a coin from the first mint (A).

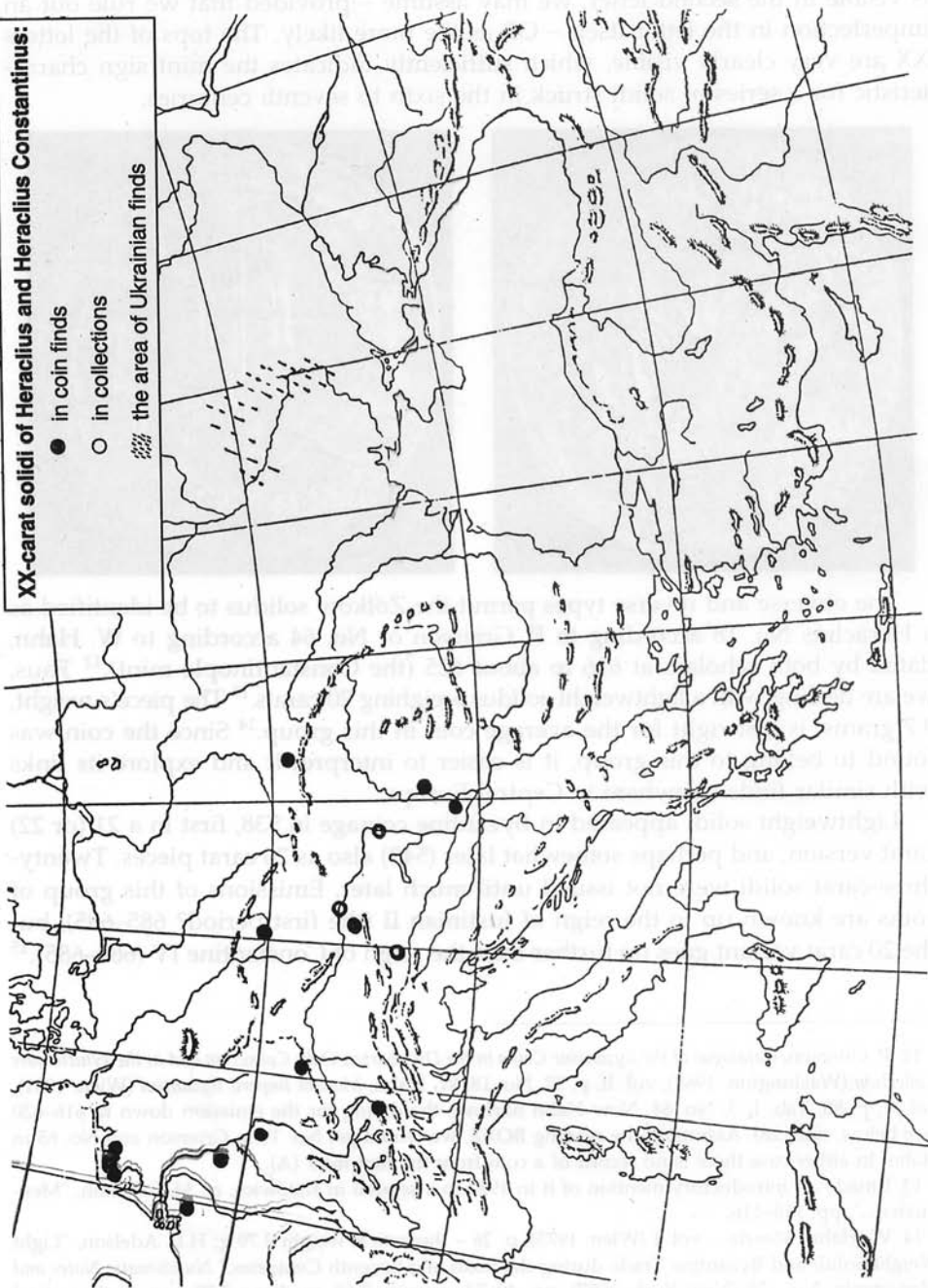
13 I made an introductory mention of it in 1982 to a session in Katowice, cf. M. Salamon, "Mennictwo...", pp. 115–116.

14 W. Hahn, *Moneta...*, vol. I (Wien: 1973), p. 26 – theoretical weight 3.79 g; H.L. Adelson, "Light Weight Solidi and Byzantine Trade during the Sixth and Seventh Centuries," *Numismatic Notes and Monographs*, No. 138 (New York: 1957), pp. 49–53: average 3.69, mediana 3.70 g, p. 5: theoretical weight according to Naville 3.734, actual according to Monneret de Villard 3.657 g.

15 W. Hahn, *Moneta...*, vol. I, pp. 26, 48–50; vol. II (Wien: 1975), pp. 16, 61; vol. III, pp. 152, 165.

XX-carat solidi of Heracius and Heracius Constantinus:

- in coin finds
- in collections
- ▨ the area of Ukrainian finds



The purpose of striking solidi 1/6, 1/12, or 1/24 lighter than the full weight is not clear and considering that they continued to circulate for an extended period of time, we may wonder whether they served one purpose only. Among interpretations offered, there are those that stress internal Byzantine goals and others that prefer their use in foreign lands. H.L. Adelson emphasized the role of Byzantine trade with the Germanic countries of Western Europe.¹⁶ P. Grierson, as he weighed many possibilities, attached the greatest importance to the use of lightweight solidi in certain parts of the empire (e.g. in the East), where their weight would have matched local metrological traditions.¹⁷ Seeking analogy with variants of the middle-Byzantine nomisma, M. Hendy saw the problem as an instance of debasing the coin by mint authorities themselves.¹⁸ W. Hahn studied the worth of lightweight solidi in relation to bronze units and came up with a meticulously calculated hypothesis of a denomination serving exchange at a time of monetary reform.¹⁹ We could almost assume that newer works began to gravitate toward inner Byzantine interpretations. However, J. Smedley proved recently that at least some seventh-century emissions were struck specially to be sent to barbarian lands.²⁰ My own conviction is that an explanation of lightweight solidi must reckon with both domestic and foreign aspects of their intended use. Without ruling out a connection with monetary replacement at a time of changing exchange rates, I assume them to have served to pay some of the donatives to the army and similarly burdensome tributes to barbaric tribes. Lightweight solidi probably made it easier to commute some of the donative payable in silver into gold.²¹ If we accept my hypothesis, then the appearance of the discussed coins abroad would evince political contacts, which does not rule out, however, that some of the tender might consequently enter the circulation. Therefore, Smedley is basically right when he argues for a political purpose for the pieces discovered in the Ukraine. For those arrived there

16 H. Adelson, *op. cit.*, pp. 104–137. The author does not rule out trade with other regions. For a critical judgement of Adelson's proposal see J.P.C. Kent, *Numismatic Chronicle*, 6th Ser., 19 (1959), pp. 137–139.

17 P. Grierson, *The Catalogue...*, p. 11–15; *idem*, *Byzantine Coins* (London: 1982), pp. 52–53; also C. Morrison, "Le tresor byzantin de Nikertai, *Revue Belge de Numismatique*, 118 (1972), pp. 56–63.

18 M.F. Hendy, "Light Weight Solidi, Tetartera and the Book of the Prefect," *Byzantinische Zeitschrift*, 65 (1972), pp. 56–63; *idem*, *Studies in the Byzantine Monetary Economy c. 300–1450* (Cambridge: 1985), pp. 492–493.

19 W. Hahn, *Moneta...*, I, pp. 25–27; II, pp. 15–16; III, pp. 16–17; 63–64; cf. my remarks in a review of Hahn's vol. III, *Wiadomości Numizmatyczne*, 29 (1985), p. 225.

20 J. Smedley, "Seventh-Century Byzantine Coins in Southern Russia and the Problem of Light Weight Solidi," in: W. Hahn, W.E. Metcalf, eds., *Studies in Early Byzantine Gold Coinage* (New York: 1988), pp. 122–129.

21 M. Salamon, "Emisje dla cesarstwa czy dla plemion barbarzyńskich? Lekkie solidy VI–VII w." (Emissions for the Empire or for Barbaric Tribes? Light Weight Solidi of the Sixth to Seventh Centuries), *Sprawozdania z Posiedzeń Komisji Naukowych* (Polska Akademia Nauk, Oddział w Krakowie) (Polish Academy of Sciences, Cracow Chapter), 35/1–2 (1991), 1993 ed., pp. 3–5 (full text under preparation). Certain points in this concept make a reference to W. Hahn, *Moneta...*, III, pp. 63–64.

as tribute payment and were not likely to be used in commercial circulation.²² A similar explanation can be offered for Western European finds. Problems arise with Central-European finds. Lightweight solidi in this region are known especially from Hungary and neighboring countries. Taking into account written records of large tribute payments to the Avars, F. Stefan suggested that lightweight solidi served precisely that end.²³ But the puzzling thing is the relatively small number of such discoveries on the Avar territory compared e.g. to the Ukraine. Adelson writes: *If payments were made to the barbarians in this lightweight coin, it would be most improbable that the Avars did not receive it, in which case the puzzling distribution may be explained with the idea that it was passed on in trade by the Avars.*²⁴ Thus the suggestion is that lightweight solidi should be sought both in Avar territories and their peripheries (of course without concluding too hastily that they got there in trade).

According to Smedley, the 20-carat denomination especially should be linked with payments to the barbarians²⁵ made about 616–625 in the form of generous sums to the Avar kaganate.²⁶ The highest sum the tribute reached in 623: it was as much as 200,000 solidi annually.²⁷ According to Smedley, this accumulation of payments before the 626 defeat at Constantinople permits establishing a chronological sequence of types bearing the mint marks OBXX and BOXX. The OBXX type

22 Cf. the notable findings of J. Werner, "Der Grabfund von Malaja Pereščepina und Kuvrat, Kagan der Bulgaren," *Abhandlungen der Phil.-Hist. Klasse* (Bayerische Akademie der Wissenschaften, N.F.), 91 (1984), pp. 17, 35.

23 F. Stefan, "Der Münzfund von Maglern-Thörl (vergraben um 570/571 bis 584/585) und die Frage der reduzierten Solidi," *Numismatische Zeitschrift*, 70 (1937), pp. 52–58, esp. 56. Many authors (like Stefan) stress the concurrence of events such as payment of tribute to the Avars, influx of solidi into Central Europe, end of lightweight solidus emission (especially of the 20-carat version). e.g. P. Grierson, *Byzantine...*, p. 100; G. Fehér, "Avaro-vizantijskiye snosheniya i osnovaniye bolgarskoy derzhavi," *Acta Archaeologica A.S.H.* 5 (1954), pp. 55–59; J. Kovačević, "Avari i zlato," *Starinar*, N.S. 13/14 (1962–1963), p. 127.

24 J. Smedley, *op. cit.*, pp. 123–124. Various tribute forms, not only monetary, are considered by A. Avenarius, "Byzantinische Münzen im nomadischen Milieu an der mittleren Donau," *Slovenska Numizmatika* 10 (1980), pp. 45–51; *idem*, *Byzantská kultura v Slovanskom prostredí v VI–XII storoci* (Bratislava: 1992), pp. 33–34.

25 *Ibid.*, p. 124.

26 The exceptional abundance of Heraclius' class II coins is pointed to by P. Grierson, *Catalogue...*, p. 12. The amounts of tribute paid to the Avars is appraised by J. Kovačević, *Avari...*, pp. 125–126; *idem*, *Avarski kaganat* (Beograd: 1977), p. 150. Yet, not all conclusions here are certain, cf. W. Pohl, *Die Awaren* (Münich: 1988), pp. 209–215, 238, 240, 245–247; H. Ditten, "Zur Bedeutung der Einwanderung der Slawen" in: *Byzanz im 7. Jahrhundert* (Berlin: 1978), pp. 97–98.

27 Nicephori Archiep. Cplitan, C. de Boor, ed., *Opuscula historica*, p. 17; J. Kovačević, *Avari*, p. 126; H. Ditten, l.c.; A.N. Stratos, "Le guet-apens des Avars," *Jahrbuch der Österreichischen Byzantinistik*, 30 (1981), pp. 113–135; W. Pohl, *op. cit.*, p. 247.

would thus be earlier as it is less numerous; BOXX would be later as being greater in number.²⁸ Yet this argument does not seem certain as the rise of 623 was neither great enough nor sustained enough radically to affect the flow of coin to the north and the proportions based on the scant number of monetary finds may yet change in the future. We need to realize that in all of Hungary we have only one find of a 20-carat solidus at an Avar site at Szentes.²⁹ Another seven pieces kept in Budapest museums are no more than likely to have come from finds.³⁰

The number of available specimens from Avar territories being so slim, fringe find acquire added significance. Here, too, we have only a few 20-carat solidi, but even this adds to our list of finds. Thus we find solidi in Austria,³¹ further away from Avar lands is the discovery published following World War II in Kšely, Kolin area, Bohemia.³² The distance from Pannonia and the Carpathian

28 J. Smedley, *op. cit.*, pp. 128–129. Now also W. Hahn speaks for a time separation of both types although the line he draws between types 64 and 65 is at the year 620; see W. Hahn, "Die Fundmünzen des 5.–9. Jahrhunderts in Österreich und den unmittelbar angrenzenden Gebieten," in: H. Friesinger, F. Daim, eds., *Typen der Ethnogenese unter besonderer Berücksichtigung der Bayern* (Wien: 1990), vol. II, pp. 241, 247. The difference in production size between types 64 and 65 may turn out to be less than is currently supposed. The Zólków solidus confirms that they were emitted by another mint, No. 1 (A).

29 H.L. Adelson, pp. 89, 184, No. 132, now in the Szentes Museum; D. Csallány, "Vizantijskiye monety v avarskikh nakhodkakh," *Acta Archaeologica A.S.H.* 2 (1952), pp. 239, 246; L. Huszár, "Das Münzmaterial in den Funden der Völkerwanderungszeit im mittleren Donaubecken," *Acta Archaeologica A.S.H.*, 5 (1954), p. 97, No. CCIV. One might suppose that among Heraclius' and Heraclius Constantine's coin finds in Hungary and the adjoining parts of Yugoslavia there are lightweight solidi that were not identified properly; cf. the finds at Mezobereny (komitat Békés), Hungary, Banatsko Petrovoselo (Torontal petrovošello), Yugoslavia, and especially Sekić (Sheghegy), Yugoslavia, L. Huszár, *op. cit.*, pp. 96–97; D. Csallány, *op. cit.*, pp. 236–239, 245–246; see also J. Kovačević, *Avari...*, p. 129.

30 H.L. Adelson, *op. cit.*, pp. 162–145, Nos. 122 (die identity to No. 118), 127, 128, 130, 139, 141, 142; p. 182, note 85. The dubious nature of some finds is spoken of in E. Gašowska, *Bizancjum...*, p. 55. Identifying collection items with concrete finds is rendered difficult by inaccurate museum records.

31 W. Hahn, *Die Fundmünzen...*, p. 241 (Peisching, Niederösterreich – perhaps Avar territories reached as far as that), 247 (Switzerland, near Austrian border); H.L. Adelson, *op. cit.*, pp. 165–68, Nos. 138, 143, 152, 156 quotes lightweight solidi of the discussed group in Austrian collections. For the periphery of Avar rule in Austria, see W. Pohl, *op. cit.*, p. 119. For the Avar's late arrival (in 626) in Lower Austria, see A. Avenarius, "Avary i Slavjane. 'Derzhava Samo'" in: *Rannefeodalniye gosudarstva i narodnosti* (Moskva: 1991), pp. 31–32. There are no 20-carat solidus finds in Slovakia, cf. A. Fiala, "Byzantské mince na Slovensku v 5.–6. storočí," *Slovenská Numizmatika*, 10 (1989), pp. 57–60. Yet the silver coins of Zemiansky Vrbovok, though later, are certain to have got there in tribute, not trade, cf. Avenarius, *Byzantská...*, pp. 46–47.

32 J. Hrala, "Byzantský solidus ze středních Čech," [The Byzantine Solidus of Central Bohemia], *Archeologické Rozhledy*, 16 (1964), pp. 512–516, 561. It is a Heraclius 65 solidus. The publisher links the find with Avar influence, which, in relation to Bohemia, is generally acknowledged by scholars, e.g. W. Pohl, *op. cit.*, pp. 113–114, 119; similarly, F. Łowmiański [Początki Polski (The Making of Poland) (Warszawa: 1964), vol. II, pp. 383–384] counts Bohemia among fringe Avar territories and stresses its weaker link with the kaganate proper than the case was with Moravia and Slovakia. Bohemia's peripheral character, however, is not sufficient proof that finds such as that of Kšely should not be associated with Avar influence or such association be questioned as is done by E. Gašowska [*op. cit.*, pp. 54–55]. It is therefore surprising that the author attempts to find an Avar connection in two discoveries in northern Poland: Gdańsk (uncertain!) and Szadzko (cf. *ibid.*, p. 61). I would be very cautious here.

Basin puts this find on par with that of Żółków. At any rate, geographical reasons prevent an association of the Żółków piece with other 20-carat-solidi-bearing areas in the Ukraine and Western Europe. Any further consideration of this find should make a reference to a possible link between Poland, southern Poland in particular, and the periphery of the Avar area.

Newer studies in history and archaeology definitely reject any direct association of Poland with the kaganate, its social and cultural influence, or Avar settlement. Nevertheless, they uphold the possibility of occasional political or economic contacts.³³ The latter, says H. Zoll-Adamikowa quoting J. Werner, *nicht nur in der Mobilität der Sache sondern auch der Person*.³⁴ The material associated with the Avars dates mainly from the late period, the eighth to ninth centuries, but there are also some objects from the early and middle stages of Avar culture, namely – and importantly from our perspective – in the Bug river region and in southern Poland, near Cracow.³⁵ The Żółków coin, however, was not found in either of these areas but in what is called the Jasło–Sanok Depressions in south-eastern Poland. Boasting very early Slavic settlement, these depressions were located along a convenient route that could connect Avar settlements on the middle Tisa and Hornad rivers with lands to the north of them, including Cracow area and the Bug.³⁶ Both the terrain and the population were assets of the Dukla Pass and favored this route over those across the Uzhok and Łupków Passes.³⁷ There is substance in M. Parczewski's supposition that it was through here that Avar aggression could be channelled from the Hornad to the Jasło–Sanok Depressions.³⁸

Thus, the find's geographical location allows its association with a broadly understood periphery of the kaganate. The Żółków solidus may also serve to confirm Smedley's point stating that lightweight solidi moved from Avars to their neighbors. The exact nature of that movement is difficult to fathom. Avar tribute money might have been passed on as gifts, profit shares (tributes or spoils), it could have been used as a precious raw material, but it is not likely to have

33 H. Łowmiański, *op. cit.*, pp. 370–387; W. Szymański, *Awarzy [The Avars]* (Wrocław: 1979), p. 46; *idem*, "Ziemie na północ od Karpat a kaganat awarski" [Land North of the Carpathians and the Avar Kaganate], *Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi*, 29 (1982), pp. 241–255; J. Szydlowski, "Awarowie a początki państwa polskiego" [The Avars and the Beginning of the Polish State], *Z Otchłani Wieków*, 26 (1960), pp. 12–14. The weakness of Avar influence, despite existing contacts north of the Carpathian Basin is also stressed by W. Pohl, *op. cit.*, p. 119.

34 H. Zoll-Adamikowa, "Zur Chronologie der awarenzeitlichen Funde aus Polen" in: *Probleme der relativen Chronologie ab Latènezeit bis zum Frühmittelalter* (Kraków: 1992), p. 312.

35 *Ibid.*, pp. 298–311; cf. the careful stance of J. Wyrzowski, *Dzieje Krakowa [A History of Cracow]* (Kraków: 1992), vol. 1, pp. 54–61; W. Szymański, "Ziemie...", pp. 248, 253–255.

36 M. Parczewski, *Początki kształtowania się polsko-ruskiej rubieży etnicznej w Karpatach [The Making of the Early Polish-Russian Ethnic Boundary in the Carpathians]* (Kraków: 1992), pp. 35, 39.

37 These passes suggested by W. Szymański, *Awarzy...*, pp. 44–45, *idem*, "Ziemie...", p. 250.

38 M. Parczewski, *op. cit.*, pp. 39–40. Although Avar settlement around Košice on the Hornad does not appear until the eighth century, it is an extension of Avar-inhabited territories south of there.

entered normal trade³⁹ understood as an exchange of goods for money since at that time it would be hard to expect any such trade north of the Carpathians.⁴⁰ Nor can we rule out – for the period 623–626 – an influx of certain sums (gifts? tribute?) directly from the empire. Suffice it to mention the long-disputed role the Byzantines might have played in sparking a possible Slavic rebellion against the Avars at the time when Samon's state was in the making. Let us also remember the still obscure, though possible, Byzantine hand in the migrations of certain peoples (Serbs and Croats) from the north to the south.⁴¹ But even such action aimed against the Avars must have used routes of communication across territories under their control.

Without trying to establish the exact circumstances in which the Heraclius' solidus reached the Wisłoka river, we may nevertheless assume that there were reasons to justify such coins arriving north of the Carpathians. I believe that this coin can – with a high degree of certainty – be counted among Avar periphery finds. The Żółków relic may therefore add to the group of items that testify to a link between southern Poland and the Avar circle. It also adds to the group of lightweight solidi in use outside the empire, among barbaric tribes.

LEGEND

Lighweight 20-carat solidi of approx. 616–625 in Europe (MIB, Heraclius 64 and 65):

* find;

** collection items possibly coming from finds;

*** area where numerous finds were made of seventh-century lightweight solidi on the central Dnieper.

Map based on data from H.L. Adelson, W. Hahn, J. Smedley.

39 For the sums of money paid by the kagan himself to northern Slavic tribes, see J. Herrmann, "Byzanz und die Slawen 'am äußersten Ende des westlichen Ozeans'," *Klio*, 54 (1972), p. 317. Various explanations are offered for the Zemansky Vrbovok hoard, which, though consisting of silver coins, may be thought of as basically similar to finds of lightweight solidi, cf. E. Kolnikova, "Problémy tovarovo-peňažnych vzťahov na Slovensku v 5.–6. storočí," *Slovenská Numizmatika*, 10 (1989), pp. 27–28. Given the missing local goods-for-money exchange, the use of money in long-distance trade is discussed in A. Fiala, *op. cit.*, pp. 61–62. For a general discussion of the problem, see J. Gaul, "Upieniężnienie wymiany w zachodniej części strefy bałtyckiej w 2. połowie V–VI w." [Monetization of Exchange in the Western Part of the Baltic Zone in the Second Half of the 5th and in the 6th Centuries] *Wiadomości Numizmatyczne*, 23 (1979), pp. 69–86.

40 On the scarcity of coin finds in Poland, see A. Kunisz, *Chronologia napływu pieniądza rzymskiego na ziemię Małopolski* [The Chronology of Roman Monetary Inflow in Little Poland] (Wrocław: 1969), p. 131; M. Parczewski, *Początki kultury wczesnosłowiańskiej w Polsce* [Early Slavic Culture in Poland] (Wrocław: 1988), p. 96. Let us note that the Żółków solidus and other finds contradicted the earlier theory that claimed that the Avars interrupted the flow of Byzantine coin to Polish territory.

41 Doubts are voiced by G. Labuda, *Pierwsze państwo słowiańskie. Państwo Samona* [The First Slavic State. The State of Samon] (Poznań: 1949), pp. 193, 259, 161; W. Szymański, *Awarowie...*, pp. 42–43; *idem*, „Ziemie...”, pp. 251–252. Byzantine action is noticed, though not linked with southern Polish lands, by H. Łowmiański, *op. cit.*, pp. 406–416; and G. Féher, *op. cit.*, p. 57. By contrast, W. Pohl (*op. cit.*, pp. 261–268) denies the credibility of respective sources.

Złota moneta bizantyńska znaleziona w Żółkowie (płd. Polska) i problem lekkich solidów w Europie Środkowej

Streszczenie

Po II wojnie światowej znaleziono w Żółkowie koło Jasła solid bizantyński Herakliusza i Herakliusza Konstantyna pochodzący z okresu, z którego znaleziska monetarne w Polsce stanowią dużą rzadkość. Moneta o średnicy 22 mm i wadze 3,7 g ma na rewersie znak menniczy OBXX (bardziej prawdopodobne niż BOXX), może zatem być określona jako solid typu 64 (za W. Hahn, *Moneta Imperii Byzantini III*), datowany na lata 616–ok. 625 i wybity w Konstantynopolu. Takie określenie egzemplarza pozwala zaliczyć go do grupy tzw. solidów lekkich o wadze 20 karatów. Na fakt ten nie zwróciła uwagi starsza literatura przedmiotu.

Lekkie solidy stanowią nie rozwiązany dotąd problem numizmatyki bizantyńskiej. Proponowano uznać je za specjalne nominały służące w VI–VII w. do przeprowadzania pewnych operacji wymiennych w czasie regulowania systemu nominalów. Sugerowano też, jakoby emitowano je w celu wysyłania do plemion barbarzyńskich. Jeśli przyjąć hipotezę, że stanowiły one rodzaj pieniądza służący wypłatom gratyfikacji (donatyw) dla wojska i sprzymierzeńców, zrozumiałe stanie się pojawianie się takich monet w prowincjach i poza granicami. Ważna grupa znalezisk lekkich solidów pochodzi z Ukrainy, inna z Europy Środkowej; te ostatnie wiązać można z trybutem płaconym Awarom lub ich sąsiadom. Solid z Żółkowa pochodzący z okresu wypłat dla Awarów, a także z okresu zmian politycznych na pograniczu słowiańsko-awarskim, może być potraktowany jako przejaw powiązań południowej Polski z kręgiem awarskim.